

BALDOR • RELIANCE

Customer information packet

EM3770T-G

7.5HP, 1770RPM, 3PH, 60HZ, 213T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
Frame Material	Iron
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA CSA EEV NEMA PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	9.500 A @ 460.0 V 19.800 A @ 208.0 V 19.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater

Part detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGX790
Layout	07LYL783
Eff. date	09-17-2021
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	04-12-2019

High Voltage Full Load Amps	9.5 a
Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.45 IN
Power Factor	81
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3441LUA

CAT.NO.	EM3770T-G						
SPEC	07-0000-0088						
HP	7.5						
VOLTS	230/460						
AMPS	19/9.5						
RPM	1770						
FRAME	213T		HZ	60		PH	3
SF	1.15	CODE	J	DES	A	CLASS	H
NEMA NOM. EFF	91.7	PF	81				
RATING	40C AMB-CONT						
CC	010A	USABLE AT 208V				N/A	
ENCL	TEFC	SER					
DE	6307	ODE	6206				
VPWM INVERTER READY							
CT6-60H(10:1)VT3-60H(20:1	50HZ 5HP 190/380V 15.8/7.9A						SF1.0

AC Induction Motor Performance Data

Record # 75447

Typical performance - not guaranteed values

Winding: 07WGX790-R019		Type: 0738M	Enclosure: TEFC
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5	Full Load Torque	22.18 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	19/9.5	Breakdown Torque	70.9 LB-FT
R.P.M.	1770	Pull-up Torque	32.7 LB-FT
Hz	60 Phase	Locked-rotor Torque	43 LB-FT
NEMA Design Code	A KVA Code	Starting Current	70.8 A
Service Factor (S.F.)	1.15	No-load Current	4.3 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	1.41 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	41°C
S.F. Amps		Temp. Rise @ S.F. Load	51°C
		Locked-rotor Power Factor	37.2
		Rotor inertia	0.934 LB-FT ²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	80	83	84	82
Efficiency	87.4	91.5	92.2	91.8	91	89.9	91.3
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	4.83	6.02	7.6	9.5	11.62	13.88	10.8

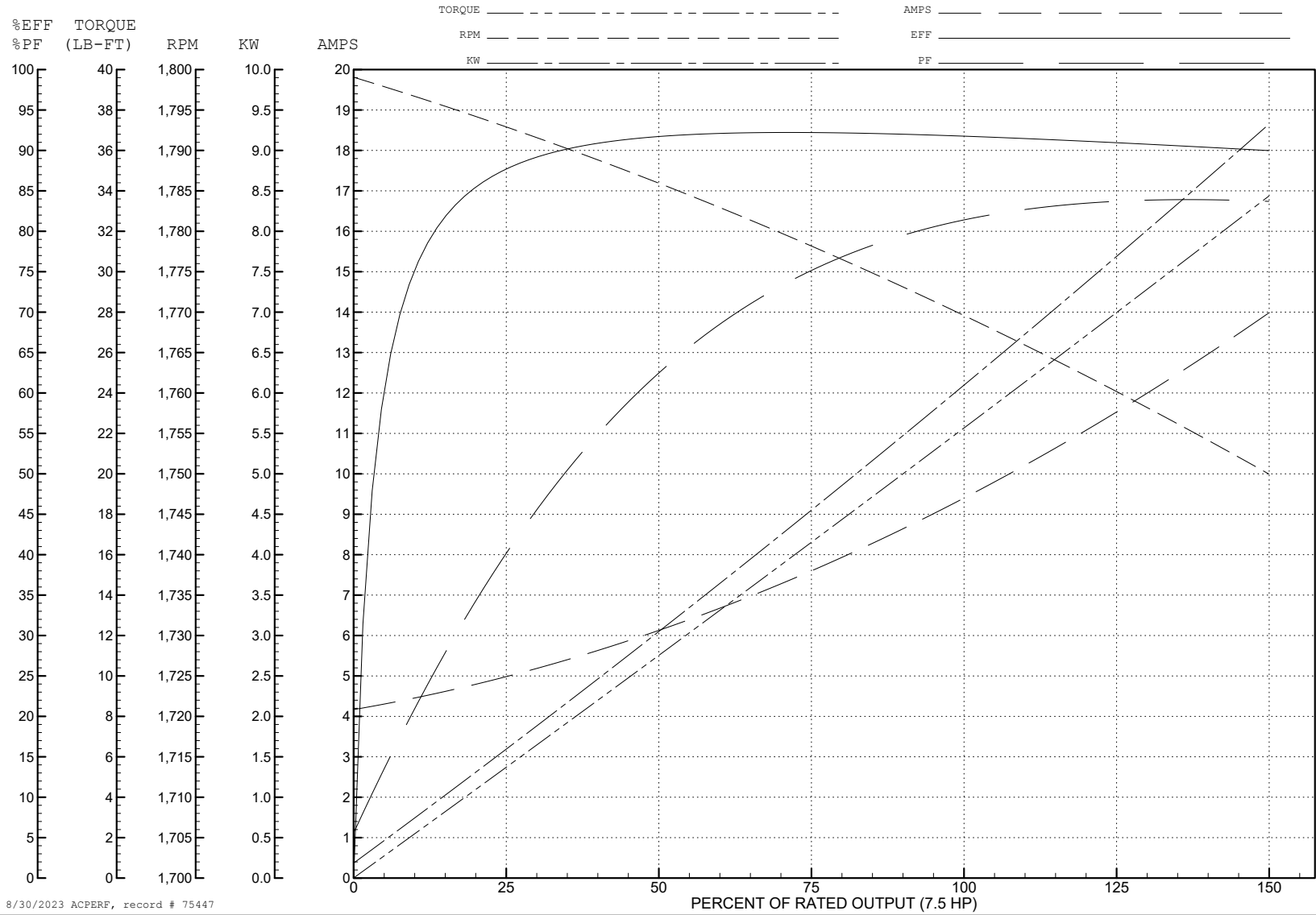
ABB Motors and Mechanical Inc.

WINDING # 07WGX790

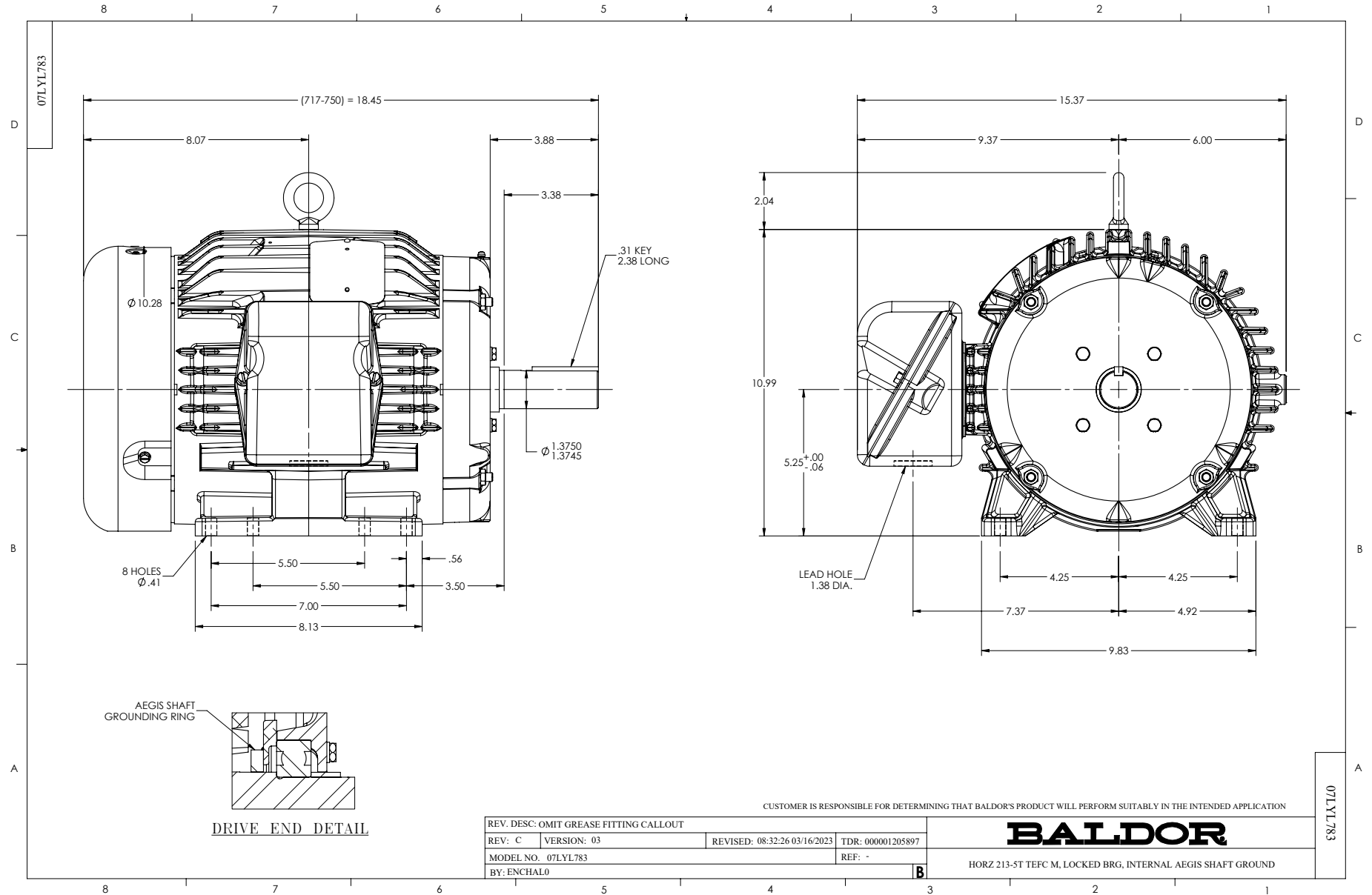
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

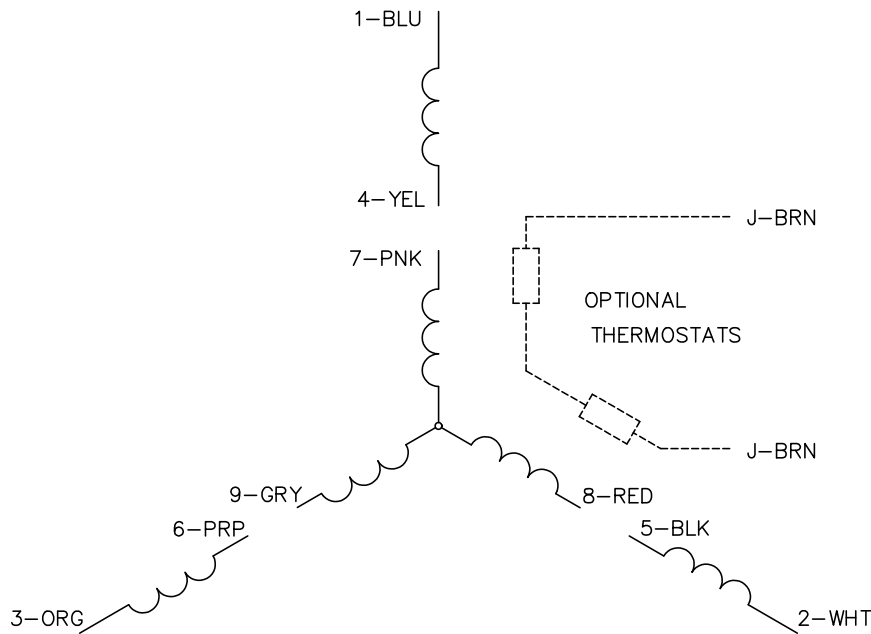
TORQUES (LB-FT): PO=70.9 PU=32.7 LR=43 LRA=70.8



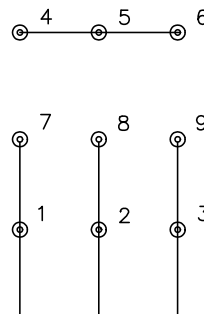
8/30/2023 ACPERF, record # 75447



CD0005

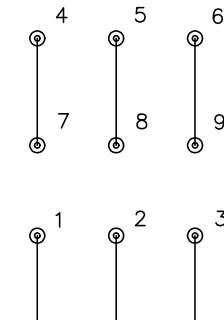


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS